

WEB PROGRAMMING LAB

6. Apply HTML, CSS and JavaScript to design a simple calculator to perform the following operations: sum,product, difference, remainder, quotient, power, squareroot and square.

Expt6.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Simple Calculator</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>

    <div class="calculator">
        <h2>Simple Calculator</h2>
        <input type="text" id="input1" placeholder="Enter first
number">
        <input type="text" id="input2" placeholder="Enter second
number">

        <div class="buttons">
            <button onclick="calculate('sum')">Sum</button>
            <button
                onclick="calculate('difference')">Difference</button>
            <button onclick="calculate('product')">Product</button>
            <button onclick="calculate('quotient')">Quotient</button>
            <button onclick="calculate('remainder')">Remainder</button>
            <button onclick="calculate('power')">Power</button>
            <button onclick="calculate('square')">Square</button>
            <button onclick="calculate('sqrt')">Square Root</button>
        </div>

        <h3 id="result">Result: </h3>
    </div>
```

```
<script src="script.js"></script>
</body>
</html>
styles.css
body {
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: #f7f7f7;
}

.calculator {
    background-color: white;
    padding: 20px;
    border-radius: 10px;
    box-shadow: 0 0 15px rgba(0, 0, 0, 0.1);
    text-align: center;
}

h2 {
    margin-bottom: 20px;
}

input {
    width: 80%;
    padding: 10px;
    margin-bottom: 10px;
    font-size: 16px;
    border: 1px solid #ccc;
    border-radius: 5px;
}

.buttons {
    margin-bottom: 20px;
```

```
}
```

```
button {  
    padding: 10px 15px;  
    margin: 5px;  
    border: none;  
    background-color: #007BFF;  
    color: white;  
    border-radius: 5px;  
    font-size: 16px;  
    cursor: pointer;  
}
```

```
button:hover {  
    background-color: #0056b3;  
}
```

```
#result {  
    font-size: 20px;  
    font-weight: bold;  
    color: #333;  
}
```

script.js

```
function calculate(operation) {  
    const input1 =  
    parseFloat(document.getElementById("input1").value);  
    const input2 =  
    parseFloat(document.getElementById("input2").value);  
    let result;  
  
    switch (operation) {  
        case 'sum':  
            result = input1 + input2;  
            break;  
        case 'difference':  
            result = input1 - input2;
```

```
        break;
    case 'product':
        result = input1 * input2;
        break;
    case 'quotient':
        result = input1 / input2;
        break;
    case 'remainder':
        result = input1 % input2;
        break;
    case 'power':
        result = Math.pow(input1, input2);
        break;
    case 'square':
        result = input1 ** 2;
        break;
    case 'sqrt':
        result = Math.sqrt(input1);
        break;
    case 'clear': cls();
    break;
    default:
        result = "Invalid Operation";
}
document.getElementById("result").innerText = "Result: " + result;
}
```